WHAT IS CLAIMED IS:

1. A method for operating a machine comprising the steps of:

providing a replaceable sub-assembly separable from the machine, the replaceable sub-assembly further comprising a memory, the memory having stored within a look up table of coefficient values relating to the utilization of the replaceable sub-assembly responsive to a design variance in the customer replaceable unit;

placing the replaceable sub-assembly into the machine;

reading the memory and placing the stored coefficient values into the machine as new upgrade coefficient values; and

operating the machine with the replaceable sub-assembly in accordance with the new coefficient values.

2. The method of claim 1 wherein the machine is a printing apparatus.

3. The method of claim 2 wherein the replaceable sub-assembly is a CRU.

4. The method of claim 3 wherein the memory is a non-volatile type of memory.

5. The method of claim 4 wherein the memory is a CRUM.

6. The method of claim 2 wherein the upgrade of coefficient values pertain to drum estimated wear and comprise AC, DC and Voff estimated wear coefficients.

7. A replaceable sub-assembly for use in a machine at various coefficient values comprising:

a memory containing a look up table; and

upgraded executable instruction suitable for directing the machine to use the replaceable sub-assembly with different coefficient values responsive to a design variance in the customer replaceable unit, where the upgraded coefficient values are stored in the look up table memory.

8. The replaceable sub-assembly of claim 7 wherein the machine is a printing apparatus.

9. The replaceable sub-assembly of claim 8 wherein the replaceable sub-assembly is a CRU.

10. The replaceable sub-assembly of claim 9 wherein the memory is non-volatile memory.

11. The replaceable sub-assembly of claim 10 wherein the memory is a CRUM.

12. The replaceable sub-assembly of claim 9 wherein the CRU is a print cartridge.

13. The replaceable sub-assembly of claim 12 wherein the coefficient values relate to photoreceptor aging rate, machine temperature and machine humidity.

14. A method for operating a printer apparatus comprising the step of:

providing a customer replaceable unit separable from the printer apparatus, the customer replaceable unit further comprising a memory, the memory having stored within a look up table of updated coefficient values relating to the utilization of the customer replaceable unit responsive to a design variance in the customer replaceable unit.

15. The method of claim 14 wherein the memory is non-volatile in type.

16. The method of claim 15 wherein the memory is a CRUM.

17. The method claim of 16 further comprising the step of operating the printer apparatus in accordance with the updated coefficient values in the look up table.

18. The method claim of 16 further comprising the steps of:

reading the CRUM and placing the stored coefficient values into the printer apparatus; and

operating the printer apparatus in accordance with the updated coefficient values.

19. The method of claim 16 wherein the customer replaceable unit is a printer cartridge.

20. The method of claim 16 wherein the customer replaceable unit is a toner cartridge.

21. The method of claim 16 wherein the coefficient values upgrade includes parameter arguments.

22. The method of claim 21 wherein the coefficient values relate to photoreceptor aging rate, machine temperature and machine humidity.

23. The method of claim 19 wherein the coefficient values are applied to equations utilized to calculate charge voltage, developer housing bias voltage, and ROS imaging exposure level as a function of photoreceptor age in cycles of machine temperature and machine humidity.

23. The method of claim 19 wherein the coefficient values pertain to drum estimated wear and comprise AC, DC and Voff estimated wear coefficients.